



# FARMERS DELIVER VALUE THROUGH NEW USES FOR THEIR PRODUCTS



Through their checkoff, Indiana farmers are leaders in identifying and commercializing innovative new uses for soybeans and corn. These crops provide a greener alternative for many products used daily.



Uses for soybean oil include margarine, cooking oil, plastics, tires, motor oil and biodiesel. Soy lecithin, extracted from soybean oil, is a natural emulsifier and lubricant. Its many uses include pharmaceuticals, protective coatings and chocolate candy bars.

## SOY-AND CORN-BASED PRODUCTS BENEFIT THE ENVIRONMENT AND ECONOMY

The Indiana Soybean Alliance and Indiana Corn Marketing Council work with product development companies, entrepreneurs, and universities to identify, develop and commercialize new uses that have significant market demand impact for Indiana farmers and the state of Indiana.

Developed in Indiana, PoreShield™, is a soy-based concrete durability enhancer that benefits the environment and the Indiana economy. Studies show it extends the life of concrete 5x-9x.<sup>1</sup>

- PoreShield has been used by county highway departments to treat more than 80 bridges in Indiana and many others nationally.
- INDOT has used about 10,000 gallons in total, with the most recent project using 5,500 gallons to treat 10 miles of state highway pavement joints.
- PoreShield is safe to handle and store, won't harm ground or water with overspray and requires no PPE.

Several new soybean uses, such as soy crayons and soy wax for candles have come from Purdue students thanks to the ISA-sponsored Student Soybean Innovation Competition that takes place annually. It's held as a way to help students identify new ways to unlock the potential of soybeans and find innovative new uses for soy.

Using corn by-products to replace historically petroleum-based products has been an industry standard for years. For example, 1 bushel of corn can create 22.4 lbs of polylactic acid polymers, which can be used to make sustainable fibers and plastics.<sup>2</sup>

## INDIANA LEADS THROUGH GROWTH IN AGBIOSCIENCES

The Indiana Agbioscience sector delivers products and services into an expanding global marketplace and is driven by innovation-based platforms. **In 2021, Agbiosciences within Indiana generated and supported a total economic impact of nearly \$52.3 billion.**<sup>3</sup>

This sector is driven by an Indiana research and development ecosystem consisting of world-leading research universities and major industrial operations.

Indiana's Agbioscience sector is growing in both output and employment numbers.

### EMPLOYMENT AND EMPLOYMENT GROWTH OF INDIANA'S AGBIOSCIENCE PLATFORMS (2012–2018)<sup>4</sup>

	EMPLOYMENT			% EMPLOYMENT CHANGE		
	2012	2015	2018	2012-2015	2015-2018	2012-2018
Agricultural Production and Distribution	69,475	70,357	69,431	1.3%	-1.3%	0.0%
Value-Added Food and Nutrition	46,737	50,611	53,393	8.3%	5.5%	14.2%
Plant Science and Crop Protection	7,799	7,548	6,594	-3.2%	-12.8%	-15.6%
Agricultural Equipment, Technologies and Systems	5,189	5,756	5,474	10.9%	-4.9%	5.5%
Animal Health and Nutrition	9,531	10,030	11,305	5.2%	12.7%	18.6%
<b>Total Indiana Agbioscience Industry</b>	<b>138,731</b>	<b>144,302</b>	<b>146,197</b>	<b>4.0%</b>	<b>1.3%</b>	<b>5.4%</b>

Learn more about  
farmer contributions at  
**FarmersDeliver.com**

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<sup>1</sup>Wisconsin DoT study

<sup>2</sup>World of Corn 2022 study. <https://ncga.com/world-of-corn/>

<sup>3</sup><https://agrinovusindiana.com/economic-overview/>

<sup>4</sup>TEconomy Partners, LLC. | Innovative Agbioscience in Indiana 2020 Assessment



THE FUTURE IS OURS TO GROW